

REMARKS

Applicant has studied the Office Action dated March 25, 2005, and has made the following remarks. No claims have been amended. It is submitted that the application, in view of the following remarks, is in condition for allowance. Reconsideration is respectfully requested.

Rejection under 35 U.S.C. § 103

Claims 1-7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2003/0142276 A1 to English JR. et al. (English JR.) in view of U.S. Patent No. 6,439,724 to Jeon et al. (Jeon). This rejection is respectfully traversed.

Claim 1 recites "a first dichroic mirror for receiving a light ... and transmitting B (Blue) light and reflecting G (Green) and R (Red) lights" and "a second dichroic mirror for receiving the light, whose optical path is separated, and transmitting the R light and reflecting the G light".

In the Office Action, the Examiner stated that English JR. does not teach specifically how the light is separated into red, green and blue. However, Jeon teaches that it was known to separate light into red, green and blue by passing blue through a first dichroic mirror DM1 and reflecting red and green, then passing the red through a second dichroic mirror DM2 while reflecting the green component. Therefore, the Examiner concluded that it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features taught by Jeon for the purpose of positional convenience. Applicant respectfully traverses the Examiner's contention.

English JR. discloses an illumination cross-dichroic 26 that splits the illumination light into three colors (red, green and blue), which are directed to three separate LCOS light valves by three identical fold mirrors 38R, 38G and 38B (see paragraph 30 of Jeon). Therefore, it is apparent that the structure of the illuminating optical system of English JR. is well defined. As stated by the Examiner, English JR. does not specifically teach how the optical system separates the light into the three different colors. Moreover, it is evident that such a light-separating structure must be implemented in the illumination cross-dichroic 26 in order for the separated light to functionally operate with the fold mirrors 38R, 38G and 38B.

Implementing a light-separating structure such as the one defined in Jeon to English JR. would not be obvious to one of ordinary skill in the art because there is no motivation to combine the two references. English JR. neither teaches nor suggests separating the three

colors by first separating the color blue from the colors red and green, and then separating the color green from the color red.

Moreover, there is no evidence to show that implementing the light-separating structure of Jeon to English JR. would be of any benefit. Working without the assistance of the applicant's specification, it would not be obvious to one of ordinary skill in the art to add two dichroic mirrors to the structure of English JR. because the mirrors add weight and complexity to the overall system. Also, because English JR. specifically discloses the use of the fold mirrors 38R, 38G and 38B, it would not be obvious to one of ordinary skill in the art to implement the light-separating structure of Jeon because of the difficulties in making the dichroic mirrors functionally operate with the fold mirrors 38R, 38G and 38B.

Accordingly, Applicant respectfully submits that neither of the cited references, either alone or in combination, disclose what is claimed in the present invention. Therefore, Applicant respectfully submits that claims 1 and 3, and the claims respectively dependent therefrom, are in condition for allowance.

CONCLUSION

In light of the above remarks, Applicant submits that the present Amendment places all claims of the present application in condition for allowance. Reconsideration of the application, as amended, is requested.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein; and no amendment made was for the purpose of narrowing the scope of any claim, unless Applicant has argued herein that such amendment was made to distinguish over a particular reference or combination of references.

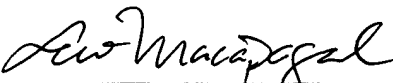
If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California,

telephone number (213) 623-2221 to discuss the steps necessary for placing the application in condition for allowance.

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Respectfully submitted,

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